WHAT IS CLAIMED IS:

1. A method for reducing noise in a sampled acoustic signal, comprising:

receiving a stream of sampled acoustic signals;

selecting a fixed number of samples;

multiplying the samples by a windowing function;

computing the fast Fourier transform of the windowed samples to yield transformed windowed signals;

selecting half of the transformed windowed signals;

calculating a power estimate of the transformed windowed signals;

calculating a smoothed power estimate by smoothing the power estimate over time;

calculating a noise estimate;

calculating a gain function from the noise estimate and the smoothed power estimate.

calculating a transformed speech signal by multiplying the gain function with the transformed windowed signal;

calculating an inversed fast Fourier transform of the transformed speech signal to yield a sampled speech signal; and

adding the sampled speech signal to a portion of the speech signal of a previous frame.

2. The method of Claim 1, wherein the fixed number of samples is thirty-two.

3. The method of Claim 1, wherein the windowing function is a hanning window function.

4. The method of Claim 1, wherein the power estimate is calculated by using the absolute value of the power estimate.

5. The method of Claim 1, wherein the power estimate is calculated using a squared power estimation.

6. The method of Claim 1, wherein the noise estimation is calculated by increasing a noise spectral estimate by a small margin.

7. The method of Claim 1, wherein the gain function, is of the form:

$$G(i)=1-\gamma\frac{|N^n(i)|}{P^t(i)}$$

where $\propto$ is a predetermined constant.

8. The method of Claim 1, wherein the gain function G(i) is the form

$$1+\lambda-\gamma\frac{|N(i)|^2}{P^t(i)}$$

where λ, γ are predetermined coefficients.

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9. A system for reducing noise in an acoustical signal comprising:

a sampler for obtaining discrete samples of the acoustical signal;

an analog to digital converter coupled to the sampler an operable to convert the analog discrete samples into a digitized sample;

a noise suppression circuit coupled to the analog to digital converter and operable to:

receive the analog discrete samples;

select a fixed number of samples;

multiply the samples by a windowing function;

compute the fast Fourier transform of the windowed samples to yield transformed windowed signals;

select half of the transformed windowed signals;

calculate a power estimate of the transformed windowed signals;

calculate a smoothed power estimate by smoothing the power estimate over time;

calculate a noise estimate;

calculate a gain function from the noise estimate and the smoothed power estimate.

calculate a transformed speech signal by multiplying the gain function with the transformed windowed signal;

calculate an inversed fast Fourier transform of the transformed speech signal to yield a sampled speech signal; and

add the sampled speech signal to a portion of the speech signal of a previous frame.

10. The system of Claim 9, wherein the fixed number of samples is thirty-two.

11. The system of Claim 9, wherein the windowing function is a hanning window function.

12. The system of Claim 9, wherein the power estimate is calculated by using the absolute value of the power estimate.

13. The system of Claim 9, wherein the power estimate is calculated using a squared power estimation.

14. The system of Claim 9, wherein the noise estimation is calculated by increasing a noise spectral estimate by a small margin.

15. The system of Claim 9, wherein the gain function, is of the form:

$$G(i) = 1 - \gamma \frac{|N^n(i)|}{P^t(i)}$$

where $\propto$ is a predetermined constant.

16. The system of Claim 9, wherein the gain function G(i) is the form

$$1 + \lambda - \gamma \frac{|N(i)|^2}{P^t(i)}$$

where λ, γ are predetermined coefficients.